



KOHLHAUER® NOISE BARRIERS – QUALITY OF LIFE

**KOHLHAUER PLANTA® – NATURAL AND ENVIRONMENT-FRIENDLY**

Austria · Bosnia & Herzegovina · Bulgaria · China · Czech Republic · France · Germany · Greece · Hong Kong · Italy · Korea · Latvia · Netherlands · Poland · Romania · Serbia · Spain · Sweden · Switzerland · Turkey · United Kingdom

**PLANTABLE**



Improved construction  
Smart system components  
Individual design options





## KOHLHAUER **PLANTA**<sup>®</sup> – UTMOST FUNCTIONALITY **FOR PLANTABLE NOISE PROTECTION**

KOHLHAUER **PLANTA**<sup>®</sup> noise barriers stand for ecologic noise barrier solutions worldwide. Whether with or without planting – KOHLHAUER **PLANTA**<sup>®</sup> excels with natural design that adapts seamlessly to any environment.

The sophisticated element design and advanced system components allow for an extremely easy assembly of the noise barriers. KOHLHAUER **PLANTA**<sup>®</sup> – the reasonable solution for any budget.

## APPLICATION

KOHLHAUER **PLANTA**<sup>®</sup> noise barriers perfectly combine an appealing finish with sustainable construction and high technical requirements. All KOHLHAUER **PLANTA**<sup>®</sup> noise barriers have been tested by renowned institutes for noise insulation, sound absorptivity, wind load, frost and road salt resistance, durability, etc.

## BENEFITS

- Innovative aluminium sectional frame for adaption to regional and statical requirements
- Solid tongue and groove interlock for easy stacking of multiple elements
- More solid vertical bars for even higher noise barriers (EN 1794-1, App. A)
- Ventilation and drain ducts for constant noise barrier performance and water drainage
- Innovative click-fastening system for various vertical post profiles (patent pending) reduces the assembly time effort at the construction site
- Modular standard components (3960 x 1000 mm, 3960 x 500 mm) for a cost-efficient and short term delivery realisation of small and large-scale projects
- Various height compensation modules (stackable) for easy adaptation to different landscapes
- Extensive colour range for all system components allows an individual design
- CE-certified quality





## NOISE BARRIER IS QUALITY OF LIFE

Noise in residential areas is often perceived as annoying. This is where man and noise are in a direct conflict. KOHLHAUER **PLANTA**® barriers help to ease the situation, supporting the life quality of our environment.

Bypass roads, highways and motorways are a permanent source of noise. Protecting the residents from annoying noise puts some special requirements on noise barriers.

Inner city areas require flexible noise barrier solutions that can be placed easily between existing objects. Limited space availability always requires suitable noise barrier solutions that integrate seamlessly with the environment.

More and more engineers, landscaping architects and authorities rely on KOHLHAUER **PLANTA**® for its high sustainability, effectivity and acceptance by residents.



## PRODUCT SPECIFICATIONS

- Excellent sound-insulating and highly absorptive performance, classified in B3 and A3-A4 according to ZTV-Lsw on both sides
- Suitable for extensive planting on both sides
- Solid element structure for a consistent natural appearance, also without planting
- Extremely high aging and corrosion resistance
- High UV and colour resistance of all used materials
- Compatible to other KOHLHAUER® noise barrier elements
- All used materials are completely recyclable

## TECHNICAL SPECIFICATIONS

- Noise insulation, group B3 according to DIN EN 1793-2
- Sound absorption, group A3-A4 according DIN 1793-1
- Wind load of up to 2,0 KN/m<sup>2</sup> and more
- Weight: 130 kg/element
- Building width 122 mm
- Fire resistance, assigned to class A1 according to EN/ISO 1716 and 1182
- Minimum useful life: 30 years
- Load bending tested according to EN 1794-1

Reasonable modifications, meeting our high quality requirements and supporting the further product development, are reserved.

## CLASSIFICATION OF THE ACOUSTIC CHARACTERISTICS

### According to EN ISO 717-1 as well as EN 1793

	Sound insulation	Absorption
PLANTA BASIC	$R_w(C;C_{tr}) = 34$ (-2;-6) dB; $DL_R$ 28 dB (Group B3)	$DL_a = 11$ dB (Group A3)
PLANTA BASIC-4	$R_w(C;C_{tr}) = 33$ (-2;-6) dB; $DL_R$ 27 dB (Group B3)	$DL_a = 12$ dB (Group A4)
PLANTA BASIC-11	$R_w(C;C_{tr}) = 36$ (-2;-7) dB; $DL_R$ 29 dB (Group B3)	$DL_a = 13$ dB (Group A4)

## SYSTEM LAYOUT

### BASIC ELEMENTS

- The basic elements are available in sizes of 3960 x 1000 mm or 3960 x 500 mm (for use in the lower or upper wall section)
- Elements can be displaced using the reusable eyebolts and sleeves integrated in in the upper chord
- Standard equipment: innovative aluminium concept frame, galvanised (80µ) load-transferring steel grid, HDPE grid fabric (green, mesh sizes: 4 x 4 mm), KOHLHAUER® insulation (145/160 kg/m<sup>3</sup>) classes B3/A3, incl. 2 fixing springs
- The elements are fixed in the pole using patent-pending fixing springs

### ADVANCED ELEMENTS

- **Height compensation 100** to compensate for various ground shapes, as base elements for ground integration or as a design variant between the elements
- **Height compensation 25** for use between the elements
- **Cover** for a proper finish of stacked elements with innovative click technology
- **Adjustment** to post HEA-U 160 and larger available
- **Grid fabrics** in various colours with small mesh size (1.5 x 1.5 mm) for an enhanced visual appearance of the noise barrier
- **Acoustic insulation** foils for meeting special sound insulation ( $R_w > 36$  dB,  $DL_R > 29$  dB) and sound absorption ( $DL_a > 13$  dB) requirements
- Selected **RAL colours** for a high-quality visual design of the noise barrier (see colour sheet)

## COLOUR CHART

### Red tones



RAL 3001  
Signal red



RAL 3003  
Ruby red

### Blue tone



RAL 5017  
Traffic blue

### Green tones



RAL 6005  
Moss green



RAL 6011  
Reseda green

### Metallic effect

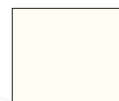


RAL 9007  
Grey aluminium



RAL 9006  
White aluminium

### White



RAL 9010  
Pure white

### Grey tones

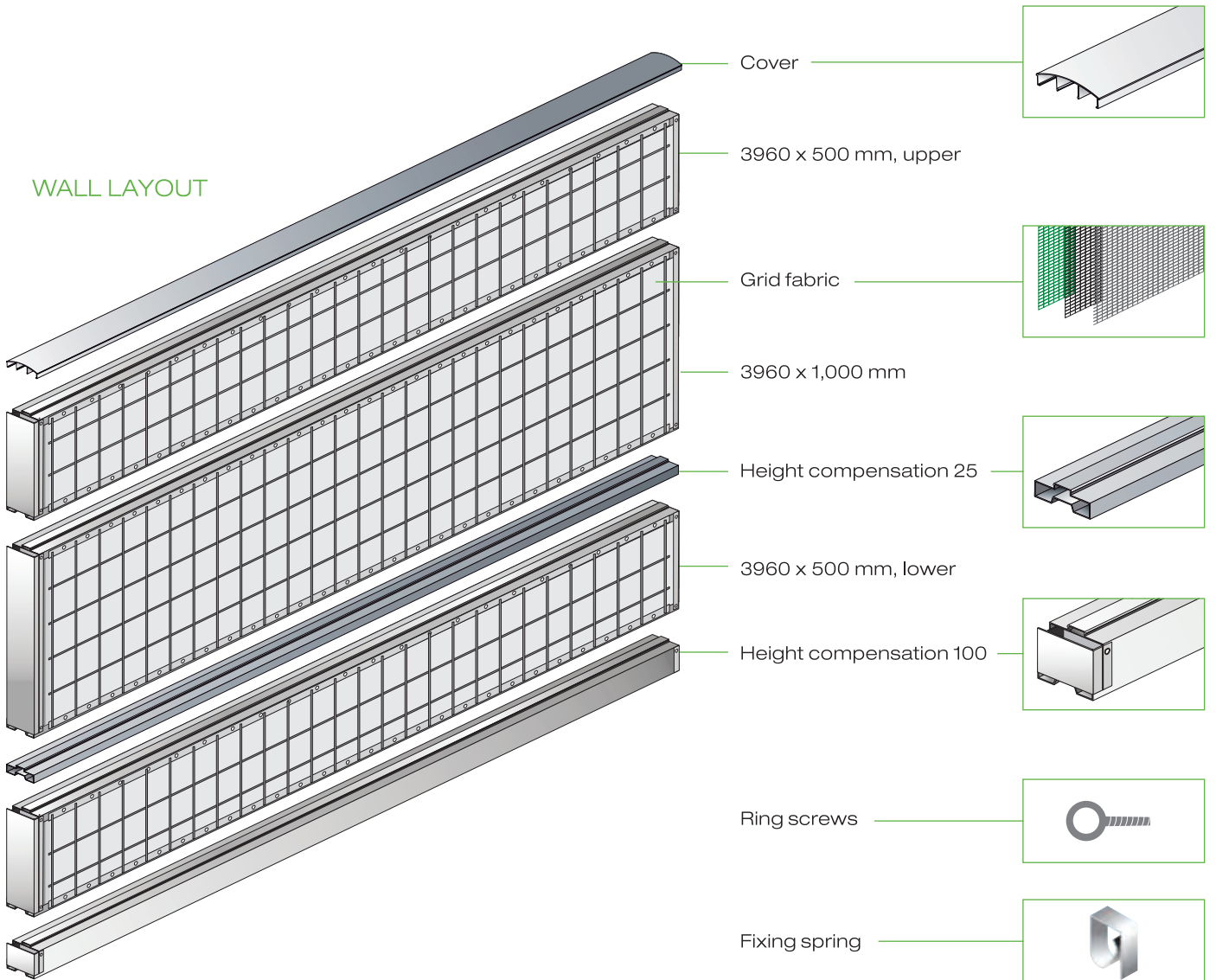


RAL 7004  
Signal grey



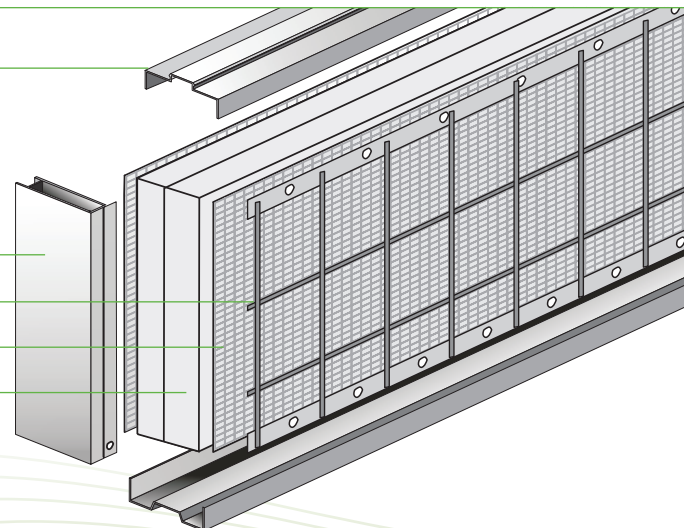
RAL 7035  
Light grey

## WALL LAYOUT



## WALL LAYOUT (FROM OUTSIDE TO INSIDE)

- Innovative aluminium structure frame with tongue and groove section
- Lateral section for supporting the fixing spring
- Load-transferring, galvanised steel grid
- UV-resistant grid fabric
- Double-layer, highly dense mineral wool, RAL quality certificate





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## MORE KOHLHAUER® PRODUCTS



The reasonable and proven  
Grid-Insulation-System (GIS)  
in many different and various  
design variants.



Transparent, reflecting  
respectively absorbent  
noise barrier systems with  
transparency & glare shield.



Double benefit: Noise barrier  
combined with sustainable  
power generation through  
solar technology.

